No. RO/LKO/US/NH-2/Km.767.380 - 767.400/2019/2405
Government of India
Ministry of Road Transport &Highways
(Chief Engineer - Regional Office, Lucknow)
N.H. Bhawan, Biotech Chowk, Lucknow Ring Road, Vikas Nagar, Lucknow - 226 022
Ph.: (0522) - 2967112, 2738226 (Tele-Fax)

Dated: 04.07.2019

Invitation of public comments

Sub: **Proposal for NOC for overhead crossing of 765KV D/C Vindhyachal - Varanasi transmission line on NH-2 between Km.767.380 - 767.400 (Handia - Varanasi section) in the State of Uttar Pradesh- Reg.**

1. The Chief Executive Officer, Powergrid Varanasi Transmission System Limited, Varanasi has submitted the proposal for overhead crossing of 765KV D/C Vindhyachal - Varanasi transmission line on NH-2 between Km.767.380 - 767.400 (Handia - Varanasi section), in District-Varanasi to the Project Director, NHAI, PIU, Prayagraj.

2. From the submitted proposal, it is seen that the height of both the pylons on which the proposed overhead line is hanging is 73.88m and for the other pylon is 97.28m. The pylons on either side are erected at distance of 141m & 108m from the centerline of the carriageway. Further, it has been submitted that the minimum clearance between the lowest conductor of the proposed line and NH carriageway is 36m.

3. As per the guidelines, issued by the Ministry vide OM No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016, the application shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

4. In view of the above, comments of the public on the above application is invited to the below mentioned address:

The Chief Engineer - Regional Officer,
Ministry of Road Transport & Highways,
N.H. Bhawan, Biotech Chowk, Lucknow Ring Road,
Vikas Nagar, Lucknow - 226 022.

Yours faithfully,

Encl.: As above

(Ruchir Agarwal)
Assistant Executive Engineer
For Chief Engineer - Regional Officer

Copy to:
(i) NIC, New Delhi - for uploading on the Ministry's website.
(ii) The Regional Officer, UP - East, National Highways Authority of India, S-2/656, A-3B, Varuna Vihar Colony, 2nd & 3rd Floor, One Place Tower, Sikraul, Varanasi - 221 002.
(iii) The Chief Executive Officer, Powergrid Varanasi Transmission System Limited, C-27/210, Kailgarh house, Jagatganj, Hindustan Times Campus, Varanasi-221 022.

(Ruchir Agarwal)
Assistant Executive Engineer
For Chief Engineer - Regional Officer

CHECK LIST

1	National Highway Number	NH-2
2	Name of Crossing	Varanasi - Allahabad (NH-2)
3	Crossing of change	767/380 & 767/400 K.M. on NH-2
4	Position of Towers	Outside the ROW of NH-2
5	Crossing Span	249 Mtr.
6	Clearance Over the road level	36.00 Mtr.
7	Angle of road Crossing	69° 00' 00"
8	Distance from NH boundary to center of tower	Loc. No.200/0(DD+30)= 112mtr.
		Loc. No.201/0(DB+06)= 79 mtr.
9	Perpendicular distance from center of tower to center of road	Loc. No.200/0(DD+30)= 141 mtr.
		Loc. No.201/0(DB+06)= 108 mtr.
10	Protection of assembly to the line	Anti Climbing devices provided
11	No. of stay required	Not required
12	Minimum Factor of Safety	2.0 (Normal Condition)
13	Size of Power conductor mm.	ACSR Zebra conductor dia 28.62 mm Al-54/3.18 mm, steel-7/1.38 mm
14	Size of Earth Wire	7/3.66 mm (steel)

(Brijesh Maurya)

Manager (Tech)
NHAI,PIU-Allahabad

(N. Srivastava)
CEO PVTSL, Varanasi

नवीन श्रीवास्तव / Naveen Srivastava
मुख्य कार्यकारी अधिकारी / Chief Executive Officer
पावरग्रिड वाराणसी ट्रांसमीशन सिस्टम लि०
Powergrid Varanasi Transmission System Ltd.
वाराणसी (उ.प्र.) / Varanasi (U.P.)

Project Director
NHAI, PIU-Allahabad

765 KV D/C VINDHYACHAL - VARANASI TRANSMISSION LINE

PROPOSAL FOR NATIONAL HIGHWAY

1	Name of Details of the Existing National Highway	NH-2 KOLKATA TO NEW DELHI
		Mile stone - Allahabad-767 km on left side of the proposed line
		Mile stone - Varanasi-768 km on left side of the proposed line
2	Situation of crossing	Between AP200/0 and AP201/0
		From AP200/0 :- 141 m
		From AP201/0 :- 108 m
3	Span at the crossing and also those on either side of crossing.	A) Crossing span 249 Mtr.
		B) Preceding span 248 Mtr.
		C) Succeeding span 389 Mtr.
4	Angle of Crossing	69° 00' 00"
5	Structure Used to cross the existing National Highway and its deviation angle.	200/0 (DD+30)-48° 37′ 52′′ LT
		201/0 (DB+6)-09° 26′ 58′′ LT
6	Conductor used to cross the Power line and its Details.	Conductor Details:-
		(i) Name:- ACSR Zebra
		(ii) Diameter:- 28.62 mm
		(iii) Cross Sectional Area:- 18.19 mm
		(iv) Weight of Conductor:- 1.621 mm
		(v) Ultimate tensile strength:- 13000 kg
		(vi) Modulus of Elasticity:- 65.8118 kg./Sq.mm 100
7	Clearance under maximum sag Condition between lowest Conductor of the proposed line and existing road	36.00 m

(Brijesh Maurya)

नवीन श्रीवास्तव / Naveen Srivastava
मुख्य कार्यकारी अधिकारी / Chief Executive Officer
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Powergrid Varanasi Transmission System Ltd.
वाराणसी (उ.प्र.) / Varanasi (U.P.)

VARANASI - ALLAHABAD NH-2 Crossing at change 767/380 & 767/400 Km. for construction of 765kV D/C Vindhyachal - Varanasi Transmission Line Between tower location no. 200/0 (DD+30) & 201/0 (DB+06)

Name of Transmission Line: 765kV D/C Vindhyachal -Varanasi Transmission Line

1	Situation of the EHV transmission line crossing on National Highway	On Varanasi- Allahabad NH-2 at change - 767/380 & 767/400 km from near village - Bihra
2	Site plan showing location of crossing (with NH boundaries) in reference to NH mileage to be supplied in triplicate	Drawing No.- WR-NR PTL/765KV/TL
3	Angle of crossing of the transmission line with the National Highway at crossing point.	69 deg.
4	The length of the span at the crossing and also those on either side of the crossing.	A) Crossing span 249 Mtr.
		B) Preceding span 248 Mtr.
		C) Succeeding span 389 Mtr.
5	in the event of the transmission line Deviating at any of the supports of the Crossing necessitating one of the Structures to be a comer structures state Angle of such deviation. The deviation of the span on either side of crossing shall be illustrated in the sketch mentioned in the clause 2 above.	Angle Tower Location No.
		200/0 (DD+30)-48° 37′ 52″ LT
		201/0 (DB+06)-09° 26′ 58″ LT
6	The number, size and materials of the Conductors and wires crossing the NH each wire under phase, neutral each guard, bearer and guard cross wire should be separately described and their disposition indicated by means of a sketch.	A) ACSR Zebra conductor dia 28.62 mm no. of conductor 6*6 No.s Unit Wt 1.621 kg/m, Ultimate Strength 13200 kg.
		B)Aluminium - 54/3.18 mm, steel- 7/1.38 mm
		C) OPGW - One no. 7/3.66 mm (steel)
7	Indicate whether the proposed guard is to be -restricted to the crossing span or it is to be continued over the adjacent span.	No Guard wire is provided
8	The deviation of the span on either side on the crossing shall be illustrated in the sketch mentioned in the clause 2 above.	Enclosed in shetch
9	System of supply (i.e voltage) frequency, No. of phases, whether neutral is earthed or not).	765kV, 50 Hz., 6 phase,D/C With 1No E/W & 1 No OPGW.
10	Height of structure above ground and Below ground separately and details of foundation.	A) Angle tower location no. 200/0 (DD+30) Height above 97.28 Mtr. Depth below GL = 3.50 M
		B) Angle tower location no. 201/0 (DB+06) Height above 73.88 Mtr. Depth below GL = 3.50 M
11	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level.	Angle Tower Location No.
		200/0 (DD+30) = 58.41 M
		201/0 (DB+06) = 34.41 M
12	Height of road level above ground level measured at the foot of the structure.	Angle Tower Location No.
		200/0 (DD+30) = 2.24 M
		201/0 (DB+06) = 2.16 M

(Brijesh Maurya)

नवीन श्रीवास्तव / Naveen Srivastava
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13	Clearance under maximum sag Conditions between road level and Lowest live conductor and between road level and lowest guard wire (state if "Box" Type guarding is provided in case of adoptions of earthed neutral system).	**At road = 36.00** Mtr.
14	Ultimate tensile stress of the steel wire Used for guard of earthwire in tones per Sq.Cms.	Not Applicable
15	Approximate distance of each of the structures to the nearest NH boundary (Marked by Pillars/ Fencing) measured along the alignment of the transmission line	Angle Tower Location No.
		200/0 (DD+30) = 112 M
		Angle Tower Location No.
		201/0 (DB+06) = 79 M
16	Are the proposed structures is in NH boundary.	Outside NH Boundary
17	Are approved anti climbing devices and warning notices provided on the structures erected.	Anti Climbing Devices and danger platesto be provided on both the tower
18	State the tensile strength and dimension of the steel used for construction of each member of the supporting structures. It is to be noted, must be approved design in conforming with I.S.I code of practice for use of structural steel in general building construction (IS. 800 1965)	Tested Steel quality. Lattice steel structure made of mild steel and high tensile steel in conformity with clause 4.0 of 802-1962 and with a tensile strength of 13000 Lbs/Sq. inch
19	Dimensions and types of brackets used for the cross arms as well as for the guard Wires.	Angle section of 8 mm thickness and Lattice type structural cross arms used.
20	Is each structure of the crossing span independently earthed by mean of an earth plate.	Pipe type Earthing as per the detail shown in the drawing and each structure will be earthed.
21	Is each structure supported by means of stage in three directions give the size of guy wires, (the neglected in calculating the strength of the structures).	No guys or stays are provided structures are self Supporting.
22	If no guard wire is provided, is the transmission line protected by device to ensure instantaneous solution in conduction.	Yes, the transmission line is protected instantaneously by high speed protection relays with carrier equipment.
23	Type of insulators used.	Long Rod insulator with an E&M strength of 210 KN Polymer Insulator will be used
24	State the method of maintenance to be employed to ensure the following protections.	
A	From overhanging of decaying trees which might fall on the line.	Way leave clearance of 33.5 Mts. on either side to be maintained.
B	To reduce the hazard to life and property.	Danger plates are provided.
C	Supporting structure including guys, from the danger of being struck by moving road vehicle.	Structure are at safe distance of road.
25	Drawing showing details of crossing disturbance of road, ground or attachment that may be Necessary (to be supplied in quadruplicate)	Enclosed

(Brijesh Maurya)

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